

ON THE GENERIC CLASSIFICATION OF
THE WEAVER-BIRDS OF
THE *MALIMBUS-PLOCEUS* GROUP

by

H.E. Wolters¹

When in 1960 R.E. Moreau published his review of the Ploceine weavers, he united nearly all species of his group A weavers in one genus, *Ploceus* Cuvier, 1817, as many other authors had done before him, notwithstanding the fact that there exist differences of some weight between the various species groups within this large genus. v. Boetticher (1941), Chapin (1954), Mackworth-Praed and Grant (1946) and others therefore have tried to split up the genus *Ploceus*, a procedure that can hardly be avoided, if the genus *Malimbus* Vieillot, 1805, the members of which are more closely allied to some species usually placed in *Ploceus* than these are to each other, is admitted as distinct, as is done in practically all classifications of weaver-birds ever proposed.

Considering this fact, I suggested in 1954 that *Ploceus* (in its wider sense) be united with *Malimbus*, but since *Malimbus* is the earlier name, it would supersede the well-known name *Ploceus*, after which the family Ploceidae is named, and this would seem to be highly inconvenient. On the other hand, it would be poor taxonomy to leave things as they are, and as some of the differences between the *Ploceus* weavers are such that they justify the distribution of the various species over several genera, it certainly would be the most natural classification, if we admit more than one genus for the species united by Moreau in his genus *Ploceus*.

1) Dept. of Ornithology, Zool. Forschungsinstitut und Museum Alexander Koenig, Bonn, W. Germany.

Admittedly, the more important differences between the species groups of *Ploceus* s.l. are of an ethological nature (including methods of nest building), but nevertheless they are always coupled with minor morphological differences, which alone probably would be regarded as of subgeneric value only but which together with the ethological characters are well suited to define genera.

The classification of the *Malimbus-Ploceus* weavers here proposed only differs from that adopted by Chapin (1954) in minor points, which classification has been confirmed to a large extent by the thorough and extensive study by Collias and Collias (1964) of nest-building methods in weavers, although Chapin's classification seems to have been mainly based on morphological characters.

In order to refine the classification and to bring it into line with my classification of the Estrildidae (Wolters, 1957, with a few amendments made in Immelmann, Steinbacher, Wolters 1965 sq.), I have tried to work out subgeneric groups in the larger genera, as far as our present knowledge allows. It is a pity that most ornithologists are reluctant to use subgenera; although the use of this taxonomic category certainly is out of place in more general papers, it is nevertheless of the utmost utility in taxonomic, zoogeographical and also many ethological discussions and cannot be replaced by the vague and anonymous "species group" nor can it be said to be the same as the superspecies, although in a few cases both categories may coincide in the same manner, as genera can be monotypic; however, the weaver subgenera *Microploceus*, *Hyphantornis*, *Xanthoploceus* and others here accepted can hardly be said to consist of nothing but a single superspecies in its classical sense.

The classification of weavers here proposed is mainly based on the examination of the weaver collections of various museums, made in the course of many years especially, of course, in the Museum Alexander Koenig, at Bonn, but also at Berlin, Durban, Frankfurt, Pretoria, and Tervuren, and I wish to express my sincerest thanks to the authorities of these museums. Moreover, while my acquaintance with weavers in the field is very much limited, I had the opportunity to observe several species in the aviary, and throughout the prepara-

tion of this paper I have given due regard to the results of the excellent work on the ethology of the Ploceinae done by **Collias** and **Collias** (1964) and by **J.H. Crook** (1960, 1963, 1964), always trying to harmonize their findings with the results of my morphological studies and also to discriminate between synapomorphic and symplesiomorphic forms in the sense of **Hennig** (1950, 1957). With this in mind, I arrived at the following classification of the weaver-birds of the *Ploceus-Malimbus* group :—

GENUS *Pachyphantes* Shelley, 1896,

Birds of Africa, vol. I, p. 36; Type, by original designation, *Hyphantornis superciliosus* Shelley.

Species: *Pachyphantes superciliosus* (Shelley, 1873)

This is a very aberrant form, with a rather short and strong bill with broad culmen and with a very much reduced outer primary; on the whole similar to *Ploceella* Oates, s.str., in coloration and pattern of plumage, but both sexes undergo a well-marked seasonal change of dress, and the nest, although globular and with side entrance like that of *Ploceella*, differs very much in structure, as pointed out by **Crook** (1963, 1964), who regards it as primitive and found its construction to be similar to that of *Amblyospiza*. This similarity may show that both *Amblyospiza* and *Pachyphantes* may have diverged rather early from the main line of evolution leading to the rest of the Ploceinae, perhaps even before this line was split into the two main branches of Euplectine and true Ploceine weavers (respectively groups B and A of **Moreau**, 1960). On the other hand, the morphological differences between *Pachyphantes* and *Amblyospiza* are such, that it is all but impossible to unite them in one and the same genus, as proposed by **Crook** (1964), while the very different mode of nest construction does not allow one to follow **Chapin** (1954) in regarding *Pachyphantes* as the Ethiopian representative of the Oriental genus *Ploceella*. Possibly the *Euplectes* group of weavers (in which I admit the genera *Coliuspasser*, *Euplectes*, *Taha*, *Brachycope*, *Quelea*, *Queleopsis* and *Foudia*) should be inserted between *Pachyphantes* and the rest of the Ploceinae, while I am inclined to regard *Amblyospiza* as representing a monotypic subfamily.

GENUS *Ploceella* Oates, 1873,

in Hume, Nest and Eggs Ind. Birds, p. 443. Type, by original designation, *Ploceus javanensis* Lesson = *Loxia hypoxantha* Sparrman.

This genus is rather similar and certainly closely allied to *Ploceus* Cuvier (see below), but with much more yellow in the breeding plumage of the male and with a different shape nest, which is globular with a side entrance, but like that of *Ploceus* (always?) contains some mud incorporated in its walls. The bill is rather heavy, but different in shape in the two subgenera here adopted. Eggs, as far as known, not usually pure white.

Subgenus *Ploceella* Oates 1873,

Species: *Ploceella hypoxantha* (Sparrman, 1788)

A much smaller bird than the species placed in the following subgenus; male in breeding plumage with black throat and yellow fringes of the feathers of the back; bill of very different shape, more similar to that of *Pachyphantes*, shorter and blunter than in the following subgenus, grosbeak-like.

Subgenus *Deignaniplectes* Subg. nov.

Species: *Ploceella megarhyncha* (Hume, 1869)

Diagnosis: Similar to *Ploceella* Oates, 1873, s.str. as well as to *Ploceus* Cuvier, 1817, but differing from the former by the much larger size (wings up to 83 mm in males), by the more pointed, less grosbeak-like, although heavy bill, which is more similar to that of *Ploceus*, and by lacking the black throat of the male in breeding plumage, the whole underside from chin to belly being yellow; the back is brown, mottled with dark, not dark with yellow feather edges. Differs from *Ploceus* by its larger size and especially, apart from the different shape of the nest, characteristic for the genus, by the fact that the underparts are yellow from chin to belly in the breeding male, and yellow at least from the chin to the chest even in the female.

Type, here designated, *Ploceus megarhynchus* Hume, 1869, Ibis, p. 356. At first sight, *Deignaniplectes* appears to link *Ploceella*, s.str., to *Ploceus*, but since its nest resembles that of *Ploceella*, with which the bird further agrees in possessing extensive yellow in its plumage, it is thought to be more probable, that the similarities to *Ploceus* are due to parallel evolution from a common ancestral stock.

GENUS *Ploceus* Cuvier, 1817,

Règne Anim., 1, p. 383. Type, by subsequent designation of Gray, 1840: *Loxia philippina* L., 1766.

Species: *Ploceus manyar* (Less., 1831), *P. benghalensis* (L., 1758), *P. philippinus* (L., 1766)

Mainly seed-eating Asiatic weavers, like *Ploceella*, with strong, but pointed bill, longer than that of *Ploceella*, s.str., but rather similar to that of *Deignaniplectes*; not much yellow in the plumage, except for the yellow crown of the males in breeding plumage, and, in *P. philippinus*, some yellow on the chest and sides of neck; back always heavily streaked. Colonial nesting; nests higher than wide, in contrast with the nests of most African weavers of the *Ploceus*-group, and with no special ceiling (see Collias and Collias, 1964), which is usually found in the more typical savanna-dwelling weavers of Africa and in some others, with or without an entrance tube, which may be very long, and, if present, is fastened to the nest chamber in another way than is the case with the African weavers (Collias and Collias, 1964); a little mud is incorporated in the thick nest walls.

While in plumage coloration looking rather less advanced than the members of the only other genus of Ploceinae living in Asia, viz. *Ploceella* Oates, the nests of *Ploceus* are certainly less primitive than in the latter genus. Considering the close relationship of *Ploceella* and *Ploceus*—even the use of mud in the nest construction by both genera points to it—we must assume that the evolution of nests with entrance tube has occurred in Asia independently from a similar course of evolution in Africa, where nests with entrance tubes can be regarded as having evolved, under certain conditions and perhaps more often than once, from an *Othyphantes*-like nest type.

GENUS *Nelicurvius* Bonaparte, 1850,

Conspectus Gen. Avium, 1, p. 439; type, by monotypy, *Loxia pensilis* Gmelin = *Parvus nelicourvi* Scopoli.

A small group of weavers with peculiar coloration, the underparts from the lower breast to the belly being greyish, and furthermore characterized by the rope-like suspension of the nest, which has a long entrance tube. The two species are, in other respects, so different that we cannot avoid placing them in two different subgenera, one of them being a typical dry-country weaver, while the other is a forest bird.

Subgenus *Saka* Roberts, 1947,

Ostrich, 18, p. 83; type, by original designation, *Ploceus sakalava* Hartlaub.

Species: *Nelicurvius sakalava* (Hartlaub, 1861)

Bill stouter than in the subgenus *Nelicurvius*; plumage pattern of breeding male somewhat similar to that of some species of *Foudia*, e.g., *Foudia eminentissima*, if the red colour of this species would be replaced by yellow: this colour covers the head and upper breast, while the rest of the underparts is greyish. Formerly often placed with *Foudia*, but certainly most closely allied to *Nelicurvius*; whether or not the genus *Nelicurvius* (including *Saka* and *Nelicurvius* s.str.) is related to *Foudia* rather than to the true Ploceine weavers of Moreau's group A, is difficult to decide, but relationship to the latter is, on the whole, more probable. *Saka* is a dry country bird.

Subgenus *Nelicurvius* Bonaparte, 1850,

Species: *Nelicurvius nelicourvi* (Scopoli, 1786).

The forest-dwelling counterpart of *Saka*, with a more slender bill than that subgenus and more saturated coloration without streaks and with black pattern on the head of the adult male, while the yellow head of young males and of females reminds one of the pattern of *Saka*.

GENUS *Sitagra* Reichenbach, 1850.

Avium Syst. Nat., pl. 79; type by monotypy, *Fringilla luteola* Lichtenstein.

Collias and Collias (1964) have shown, that this group of weavers, superficially rather similar to *Textor*, in reality is not so closely allied to that genus. It not only contains the very small, slender billed and mainly insectivorous species of *Sitagra* s.str. (*luteola*, *pelzelni*; *subpersonata*), but also the somewhat larger "*Textor*" *intermedius*, which can be shown to be rather closely related to the former, since it shares with them several characters, among which one as "non-adaptive" as the leaden-grey colour of the feet; in most other weavers, except *Hyphanturgus*, the colour of the feet is either brownish or blackish. Other characters that *intermedius* has in common with true *Sitagra* are the rather slender bill, the pure white eggs, the yellowish coloration of the female and the fact, that its nest like that of *Sitagra* s.str. and *Hyphanturgus* lacks the special ceiling present in the nests of *Textor* (see Collias and Collias). It was Austin Roberts who was aware of the relationship of *intermedius* to *Sitagra* s.str. and placed it (1922, 1947) in this genus.

The nests of *Sitagra intermedia* as well as those of *S. luteola* have a long entrance tube such as is usually associated with forest-dwelling weavers in Africa, and this may lead to the conclusion that *Sitagra* is a secondarily savanna-dwelling group, which may have a common ancestor with the bush- and forest-dwelling genus *Hyphanturgus*, which has a similar shape of bill, similar leaden-grey feet and a very similar form of nest. The nest of *S. pelzelni* (and probably that of *S. subpersonata*) secondarily has lost its long entrance tube, but otherwise *S. pelzelni*, a riparian species, obviously is very closely allied to *S. luteola*. I therefore do not think it to be necessary to separate *S. pelzelni* and *S. subpersonata* from *S. luteola* in a special subgenus, *Icteropsis* Pelzel, 1881 (type, *Sitagra pelzelni* Hartlaub). Instead I admit only two subgenera, *Sitagra* s.str., and *Hypositagra*, here proposed for *S. intermedia*.

Subgenus *Sitagra* Reichenbach, 1850.

Species: *Sitagra subpersonata* (Cabanis, 1876), *S. pelzelni* (Hartlaub, 1887) (incl. subsp. *monacha*), *S. luteola* (Lichtenstein, 1823)

Smaller than the following subgenus, bill narrow, rather long and fine, but not distinctly keeled; not very gregarious, even the dry country species *S. luteola* not always breeding in colonies and never in large ones; nests with (*S. luteola*) or without entrance tube. The little-known *S. subpersonata* is larger than the rest of the subgenus and may perhaps prove to be a riparian relative of *S. intermedia* rather than of *S. luteola*, as is *S. pelzelni*.

Subgenus *Hypositagra* Subg. nov.

Species: *Sitagra intermedia* (Rüppell, 1845).

Diagnosis: Resembling *Sitagra* Reichenbach, s.str., in all respects, except for being larger and usually breeding in small colonies; nests with more or less pronounced entrance tube. **Type**, here designated, *Ploceus intermedius* Rüppell, 1845, Syst. Übers., p. 71.

GENUS *Hyphanturgus* Cabanis, 1851,

Museum Heineanum, 1, p. 182; type, by original designation, *Ploceus ocularius* Smith = *Ploceus ocularis* Smith.

Species: *Hyphanturgus melanogaster* (Shelley, 1887), *H. nigricollis* (Vieillot, 1805), *H. ocularis* (Smith, 1839).

A well defined genus with a characteristic pattern of head markings: ♂ with black eyestripe and black bib on the throat, ♀ without this black bib, but with eyestripe; resembling *Sitagra* in having leaden grey feet (blackish in *H. melanogaster*); bill variable, rather long and slender in *H. ocularis*. Nests with entrance tube, similar in construction to those of *Sitagra intermedia* or *S. luteola*. Not breeding in colonies. Eggs usually spotted.

H. melanogaster, which is sometimes separated in a subgenus or genus *Heterhyphantes* Sharpe, 1890, morphologically is a true *Hyphanturgus*, although it possesses a black belly and stiffened and furlike feathers

on throat and head. If we regard it as subgenerically distinct, we hardly can unite *nigricollis* and *ocularis* in a single subgenus, and accepting three monotypic subgenera would give too much weight to the rather slight differences separating them. There are still less reasons, from a morphological point of view at least, for placing *H. melanogaster* close to *Textor cucullatus* and its relatives, as has been done by Crook (1964, p. 155).

GENUS *Sitagroides* Roberts, 1947,

Ostrich, 18, p. 81; type, by original designation, *Sitagra aliena* Sharpe.

Species : *Sitagroides alienus* (Sharpe, 1902).

A single species of doubtful affinities. Size rather small; bill slender; head all black in male, this colour more restricted in the female, which otherwise resembles the male; nest similar to that of *Hyphanturgus*; eggs spotted. Provisionally placed by Chapin (1954) with *Hyphanturgus*, but, while this author already pointed to the somewhat different shape of the bill, we may add that *Sitagroides* has a very different plumage pattern, especially with regard to the coloration of the head; on the other hand, although the feet look blackish brown in dried skins, their colour is given as bluish grey on labels in the Museum Alexander Koenig, Bonn, thus agreeing with feet colour in *Hyphanturgus* and *Sitagra*. Perhaps, however, *Sitagroides* may eventually prove to be closest to *Symplectes*, since it shows a remarkable similarity in plumage pattern with *Symplectes olivaceiceps*, although it is a smaller bird.

GENUS *Symplectes* Swainson, 1837,

Class. Birds, 2, p. 279; type, by monotypy, *S. chrysocomus* Swainson = *Ploceus bicolor* Vieillot.

Species: *Symplectes olivaceiceps* Reichenow, 1899; *S. nicolli* (W. Sclater, 1931); *S. bicolor* (Vieillot, 1819).

The members of this genus, whose nests, as far as is known, are similar to those of the fore-going genera in being retort-shaped with a long entrance tube and with no special ceiling, show a tendency to

a bluish grey or dark slate coloration of the wings, absent only in several subspecies of *S. bicolor*; such a coloration is not found in any other group of true weavers. Otherwise the colour pattern of the plumage is much like that of *Sitagroides*, with the head, including—in most cases—the upper throat, either greenish, dark or black; the throat and forecrown often speckled with yellowish; the back either concolorous with the head or lighter brownish or greyish. In *S. nicolli* the forecrown is more or less yellow in the male. This latter species is intermediate in coloration between *S. olivaceiceps* and *S. bicolor*, and therefore I do not believe, that a special subgenus, *Bensonhyphantes* Roberts, 1947, can be maintained for *S. olivaceiceps* and *S. nicolli*, but, on the other hand, these two probably are not conspecific.

GENUS *Rhinoploceus* Gyldenstolpe, 1924,

Kongl. Svensk. Vet.-Akad. Hanfl., 1, p. 36; type, by original designation, *Malimbus flavipes* Chapin.

Species: *Rhinoploceus flavipes* (Chapin, 1916).

I am unable to say anything definite about the relationships of this rare and poorly known weaver, which perhaps one day may prove to be nothing but another subgenus of *Phormoplectes*, closely allied to *Melanoploceus*, instead of being related to *Malimbus*, near which it was often placed in the past. Even for the time being I accept a genus *Rhinoploceus* with great reluctance only, although, admittedly, the yellow feet and the large nares are rather unusual characters.

GENUS *Phormoplectes* Reichenow, 1903,

J. Orn., 51, p. 149; type, by original designation, *Sycobrotus insignis* Sharpe.

A group of medium-sized to rather large weavers with black, chestnut and yellow colours predominating in their plumage, at first sight somewhat reminiscent of *Textor*, but with rather shorter bill and with females similar to males in coloration, although usually with more black or dark colour on the crown, except, of course, in that species where the crown of the male too is black (*Ph. tricolor*). Nests like

those of the foregoing genera, retort-shaped, without a special ceiling and with a more or less well developed entrance tube. Eggs pale blue or whitish. Forest-dwelling, and like several other forest weavers having an habit of creeping along the trunks in a nuthatch-like manner.

The genus consists of three subgenera, *Melanoploceus*, a second one, poorly known and as yet unnamed, and *Phormoplectes* s.str.

Subgenus *Melanoploceus* Mackworth-Praed & Grant, 1946,

Ibis, 88, p. 226; type, by original designation, *Hyphantornis tricolor* "Hartlaub" auct. = *Hyphantornis fusco-castanea* Barboza du Bocage¹

Species: *Phormoplectes fuscocastaneus* (Bocage, 1880)

Although the bill of this bird is heavier than that of *Phormoplectes* s.str. and though it lacks the yellow colour on the middle of the back of the members of that subgenus (it is reduced to a yellow collar on the hindneck), in all other respects it is so close to *Phormoplectes* s.str. in morphology as well as in habits, that it can hardly represent anything else but a subgenus of the enlarged genus *Phormoplectes*.

Subgenus: — — (unnamed).

Species: *Phormoplectes aureonucha* (Sassi, 1920).

Since I am not well enough acquainted with this rare species, I do not dare to give a name to this nevertheless obviously well-differentiated subgenus, in several regards intermediate between *Melanoploceus* and *Phormoplectes* s.str., although the greyish-green underparts may be a more primitive character.

Subgenus *Phormoplectes* Reichenow, 1903,

Species: *Phormoplectes insignis* (Sharpe, 1891) *Ph. dorsomaculatus* (Reichenow, 1893), *Ph. preussi* (Reichenow, 1892).

A closely-knit group of three very similar species; males as well as females with black and yellow plumage, the crown being yellow or chestnut in the former, either wholly or only in the anterior part black in females; characterized by the yellow middle part of the back. Bill shorter than in *Melanoploceus*.

1) See Mees (1970), Zool-Verhandeligen, no. 109, p. 68.

GENUS *Notiospiza* Oberholser, 1905,

Smiths. Misc. Coll., 48, p. 64; *nom. nov.* for *Sharpia* Barboza du Bocage, 1878, Journ. Sci. Math. Phys. Nat. Lisboa, 6, p. 258 (type, by original designation, *Sharpia angolensis* Barboza du Bocage), not *Sharpia* Tourniet, 1873.

Species: *Notiospiza angolensis* (Bocage, 1878).

The light middle line of the back as well as the nuthatch-like movements of this little-known weaver of *Brachystegia* woodlands suggest relationship with *Phormoplectes*, where it is placed by Chapin (1954), but its dull-coloured plumage with whitish wing-bars make it look so unlike any of the bright-coloured members of the genus *Phormoplectes*, that, at least for the time being and until more is known about this strange weaver, I prefer to retain the genus *Notiospiza* as distinct.

GENUS *Thomasophantes* W. Sclater, 1925.

Bull. Brit. Orn. Cl., 46, p. 16; type, by original designation, *Ploceus st.thomae* Hartlaub, 1848.

Species: *Thomasophantes sanctithomae* (Hartlaub, 1848)

Still much more aberrant than *Notiospiza*, with which it shares the whitish wing-bars, whereas in all other respects it is very different, and it can hardly be thought to have any close relationship with that genus. I only leave it near *Notiospiza*, because I cannot suggest a better place for this strange slender-billed weaver and because, judging by the description of its nest, it may be a very aberrant member of that group of forest or secondary savanna weavers, to which belong all the foregoing genera from *Nelicurvius* to *Notiospiza*.

GENUS *Anaplectes* Reichenbach, 1863,

Singvögel, p. 86; type, by subsequent designation of Sharpe, 1890: *Ploceus melanotis* Lafresnaye = *P. leuconotus* Müller.

Species: *Anaplectes rubriceps* (Sundevall, 1850) (incl. subsp. *leuconotus*).

This genus has red pigments in its plumage like *Malimbus* and, judging by the retort-shaped form and entrance tube of its nest, certainly belongs to the large group of weavers comprising the genera from

Nelicurvius to *Malimbus* whose common ancestor may have invaded the forest, where most of its descendants still live, while others have readapted to life in savanna or even in still drier surroundings. But whereas the nests of most members of this group do not possess the special ceiling characteristic of the nests of savanna-dwelling weavers in Africa—the forest weavers probably lost this character in the course of their evolution—*Anaplectes* and several species of *Malimbus* retained the double ceiling of their nests. This fact and the occurrence of red pigments in the plumage of both genera seem to show that they are related, but in contrast to all *Malimbus* species *Anaplectes* has become a true savanna-woodland bird and does not show the predominance of black melanins seen in the plumage of *Malimbus*, which may well have been acquired after *Anaplectes* had diverged from the common ancestral stock. The bill of *Anaplectes* is red, a unique feature in the *Ploceus-Malimbus* group of weavers, and the eggs differ from those of *Malimbus* in being pure greenish blue. It seems better, not to unite *Anaplectes* with *Malimbus*, as Moreau (1960) proposed to do.

GENUS *Malimbus* Vieillot, 1805,

Ois. Chanteurs, p. 71; type, by monotypy, *Malimbus cristatus* Vieillot = *Tanagra malimbica* Daudin.

Species: *Malimbus erythrogaster* Reichenow, 1893; *M. malimbicus* Daudin, 1802; *M. nitens* (Gray, 1831); *M. coronatus* Sharpe, 1906; *M. racheliae* (Cassin, 1857); *M. cassini* (Elliot, 1859) (incl. subsp. *ibadanensis*); *M. scutatus* (Cassin, 1849); *M. rubricollis* (Swainson, 1838).

A group of forest weavers that is well characterized by its black and scarlet plumage; the females either resemble the males or are differently clad in black and scarlet, but their plumage is never sparrow-like; as in most other species of the forest weaver group there is no seasonal change of dress. The fairly powerful bill, which is black, is not very much different from that of *Textor*, although the *Malimbus* species are insectivorous. Their retort-shaped nests, with or without a sometimes very long entrance tube, on the whole resemble those of

the other species of the forest weaver group (*Nelicurvius*, *Hyphanturgus*, etc.), but some have retained the special ceiling found in the true savanna weavers' nests, although this second ceiling is always poorly developed. Although *Malimbus* weavers are, on the whole, much less social than most savanna weavers, in *M. rubricollis* several nests may be placed very close one to another, even forming a single compound (Crook, 1960, p. 5). Judging by habits and by the structure of the nest, three species groups can perhaps be recognized in *Malimbus*, although it would be premature to recognize them as formal subgenera, until we know much more about the habits of these birds. In one group, which consists of *M. erythrogaster*, *M. malimbicus*, *M. nitens*, and *M. coronatus*, the nests are crudely woven and have a rather short entrance tube; in the second group, comprising *M. cassini*, *M. scutatus* and probably *M. racheliae*, they are much more finely woven and possess a long to very long entrance tube, while *M. rubricollis* represents a third "group", having a habit of moving in a nuthatch-or *Phormoplectes*-like manner along the boughs and, although sometimes it nests singly, at other times builds its extraordinary twig nests, which have a broad, medium-sized entrance tube (for a detailed description cf. Crook, 1963, pp. 250–252), in close neighbourhood one to another. The eggs of *Malimbus* species are either white (*cassini*, *scutatus*) or spotted.

GENUS *Othyphantes* Shelley, 1896,

Birds of Africa, vol. 1, p. 37; type, by original designation, *Sycobrotus reichenowi* Fischer.

A group of medium-sized, but rather heavy-billed weavers, somewhat similar to *Textor*, differing from that genus by the dark or black coloration of the crown of females in most species (except *O. bannermani*), whereas this part of the head is yellow or chestnut in the males of most forms; they further differ from *Textor* as well as from all African forest weavers by the form of their nests, which are globular with a side entrance, but possess a double ceiling like those of *Textor*; the nests are wider than high, thus differing from those of *Ploceella* and the Euplectine weavers. Perhaps *Othyphantes* may

be regarded as a genus that has remained similar to the common ancestor of both forest and savanna weavers of Africa, even with regard to its habitat, some species of *Othyphantes* living in montane or lowland forests, others in drier savanna woodland or in riparian growth. Not nesting in colonies. Eggs spotted. Whereas one species, *O. batesi*, is difficult to place, the rest can be distributed among two subgenera, viz. *Othyphantes* Shelley, s.str., and *Xanthoploceus* Mackworth-Praed & Grant.

Subgenus *Othyphantes* Shelley, 1896,

Species: *O. baglafecht* (Daudin, 1802) (including, as subspecies, such different looking forms as *reichenowi*, *stuhlmanni*, *emini*, etc.).

Throat never black, but in several forms back of that colour; hind crown black or dusky greenish, fore crown either black or yellow. Some forms with, others without, a seasonal change of dress.

Subgenus *Xanthoploceus* Mackworth-Praed & Grant, 1946,

Ibis, 88, p. 228; type, by original designation, *Hyphantornis bertrandi* Shelley.

Species: *Othyphantes bertrandi* (Shelley, 1893), *O. nigrimentum* (Reichenow, 1904), *O. bannermani* Chapin, 1932. — *O. batesi* Sharpe, 1908, is an aberrant species, which can only doubtfully be assigned to this subgenus.

This is, morphologically speaking, not a very homogeneous subgenus, *O. nigrimentum* being a larger bird than the rest and somewhat aberrant in plumage pattern, while in females of *O. bannermani* the crown is no longer black as in other species of the genus. These rather big differences between the species of an obviously closely related group together with their patchy distribution in rather limited and isolated areas may point to an early origin of this group of weavers. In contrast to *Othyphantes* s.str., in males the throat or, at least, the chin (in *nigrimentum*) is black.

GENUS *Textor* Temminck, 1827,

Planch. Col., livr. 75, pl. 446; type, by monotypy, *Oriolus cucullatus*.

This is a very large genus, comprising most of the African savanna weavers, some of which have become inhabitants of riparian growth. The birds regarded as belonging to this genus are large to rather small weavers, which in most forms have a seasonal change of dress with males in breeding plumage being mainly golden yellow or chestnut with black markings, a few mostly or wholly black, while females are sparrowy or non-descript, except for one species, *T. albinucha*, a black bird of somewhat uncertain position, whose females resemble the males. The bill of *Textor* is rather strong, but pointed, with rounded culmen, which is not distinctly ridged; only in two subgenera (*Deleplectes* and *Dendrhyphantes*) is it markedly finer. Most species build kidney-shaped nests (as opposed to the retort-shaped nests found in the forest weaver group, including *Hyphanturgus* and *Sitagra*; for differences see Crook (1960, 1963)) with or without short entrance tubes and with a special inner ceiling (see Collias and Collias, 1964). Most species nest more or less colonially. The eggs are variable. Owing to the great variety of species several more or less well-defined subgenera will have to be accepted.

Subgenus *Deleplectes* Subg. nov.

Species: *Textor aurantius* (Vieillot, 1805), ? *T. princeps* (Bonap., 1850).

This is the first subgenus in a group of mainly yellow-coloured weavers, practically without black markings, which may or may not be more closely related *inter se* than to the rest of the subgenera of *Textor*. Within this group, and perhaps even in the whole genus *Textor*, *Deleplectes* is the most aberrant subgenus, and may even one day prove to deserve generic rank; in the past, these birds were sometimes linked with *Hyphanturgus*, from which, however, they not only differ in coloration, but also in the form of the nest.

Diagnosis: Differs from all other subgenera of *Textor* by its fine and slender bill and from most of them by the unmarked (except for small black spot on the lores) yellow breeding plumage of the males; while the form of the bill is somewhat reminiscent of that of *Hyphanturgus ocularis*, *Deleplectes* differs from this species and from all groups of weavers outside the genus *Textor*, as here defined, by the all yellow breeding plumage of the male.

Type, here designated, *Malimbus aurantius* Vieillot, 1805, Histoire naturelle des plus beaux oiseaux chanteurs . . . , p. 73.

Note. — Whether *T. princeps* is rightly placed in this subgenus, I cannot decide from my own experience, and I simply follow the arrangement of Crook (1964), who places it with *T. aurantius* in one and the same species group.

Subgenus *Oriolinops* Roberts, 1947,

Ostrich, 18, p. 73; type, by original designation, *Hyphantornis xanthops* Hartlaub.

Species: *Textor xanthops* (Hartlaub, 1862).

A large all yellow weaver, with much stouter bill than that of *Deleplectes* and with females but little different from the males; exceptional among *Textor* weavers owing to its very simple (probably secondarily simplified) nest advertisement display (Crook 1964).

Subgenus *Euploceus* Roberts, 1922,

Ann. Transvaal Mus., 8, p. 271; type, by original designation, *Oriolus capensis* Linnaeus.

Species: *Textor capensis* (Linnaeus, 1766), *T. temporalis* (Bocage, 1880).

Large yellow weavers with some chestnut or dark olive on the head and with long, rather slender bills (less so in *T. temporalis*). Eggs uniform greenish blue.

Subgenus *Xanthophilus* Reichenbach, 1863,
Singvögel, p. 84; type, by subsequent designation (Sharpe, 1890),
Ploceus aureiflavus Smith = *P. aureoflavus* Smith.

Species: *Textor subaureus* (Smith, 1839) (incl. subsp. *aureoflavus*).
Smaller than *Euploceus* and with shorter, but comparatively much
stouter, bill and without chestnut about the head. Eggs spotted on a
white or bluish ground.

Subgenus *Xanthoplectes* Roberts, 1922,
Ann. Transvaal Mus., 8, p. 270; type, by original designation, *Hy-
phantornis xanthopterus* Finsch & Hartlaub.

Species: *Textor bojeri* (Cabanis, 1869), *T. castaneiceps* (Sharpe, 1890);
T. xanthopterus (Finsch & Hartl., 1870).

Very similar to *Xanthophilus*, breeding males yellow either with some
chestnut on head or neck (*T. bojeri*, *T. castaneiceps*) or with a brown
foreneck (*T. xanthopterus*) and characterized by the fact, that their
eggs are always (*T. bojeri*, *T. castaneiceps*) or often (*T. xanthopterus*) of
a strange chocolate- or olive-brown colour. *T. xanthopterus* stands
somewhat apart and probably is the most primitive member of the
subgenus, connecting it with *Microploceus*.

Subgenus *Microploceus* Roberts, 1924,
Ann. Transvaal Mus., 10, p. 192; *nom. nov.* for *Microplectes* Roberts,
1922, Ann. Transv. Mus., 8, p. 270, *nec* Reitter, 1896, Verh. Ver.
Brunn., 34, p. 105. Type of *Microplectes* (and hence of *Microploceus*),
by original designation *Ploceus velatus* Vieillot.

Species: *Textor castanops* (Shelley, 1888), *T. taeniopterus* (Reichenbach,
1863) *T. reichardi* (Reichenow, 1886), *T. velatus* (Vieillot, 1819),
T. atrogularis (Heuglin, 1864) (syn. *heuglini* Reichw.), *T. vitellinus*
(Lichtenstein, 1823), *T. galbula* (Rüppell, 1840).

Medium-sized to rather small weavers with dark brown or black head-
markings in the breeding male, the crown (except on the forehead),
however, always being yellow or chestnut; females sparrowy. Most

similar in appearance to *Hypositagra*, but, besides the difference found in the form of the nest and the colour of the eggs, always distinguished by having brownish, but never leaden-grey feet; moreover, the females are less yellowish. Breeding more or less colonially in steppe and savanna country and in reeds. Eggs variable.

Subgenus *Hyphantornis* Gray, 1844,

Genera of Birds, 2; type, by subsequent designation (J.E. Gray, 1855), *Ploceus grandis* "Vieillot" = G.R. Gray.

Species: *Textor dicrocephalus* (Salvadori, 1896), *T. badius* (Cassin, 1850), *T. jacksoni* (Shelley, 1888), *T. melanocephalus* (Linnaeus, 1758) (incl. subspp. *capitalis* and *dimidiatus*, which, however, may prove not to be conspecific), *T. grandis* (Gray, 1844).

Except for the very large *T. grandis*, a group of medium-sized weavers, very similar to *Microploceus*, but crown, like the rest of the head, black in the nuptial plumage of the male. The giant *T. grandis*, although somewhat resembling *Textor* s.str., is, I believe, rightly placed here, since it differs from *Textor* s.str. by the plain coloration of its back, which lacks the black markings found in that subgenus, and may well be regarded as an island representative of *T. melanocephalus*. The large size of this bird may be considered as a parallel case to that found in the subgenus *Deleplectes*, where the species from Principe, *Textor princeps*, if rightly placed with that subgenus, is considerably larger than the continental *T. aurantius*.

Subgenus *Textor* Temminck, 1827,

Species: *Textor cucullatus* (Müller, 1776) (incl. subspp. *nigriceps*, *spilonotus*), *T. spekei* (Heuglin, 1861) (*T. spekeoides* (Grant & Mackworth-Praed, 1947) probably is a subspecies of *T. spekei*).

Rather large weavers, most similar to *Hyphantornis*, especially to the large *T. (H.) grandis*, but back of male in nuptial plumage (not in all forms is there a seasonal change of dress) with black markings, which either are evenly distributed as black centres to the feathers or form

a V-shaped pattern on the back; while in most members of this subgenus the crown is black in the breeding dress of the male, it is yellow in two subspecies of *T. cucullatus* (*T.c. spilonotus* and *T.c. dilutescens*) and in *T. spekei* (including *spekeoides*). The bill of *Textor* s.str. is stout and rather long, the culmen is slightly rounded. These birds breed in large colonies, but while the nests of *T. cucullatus* are kidney-shaped as in most other members of the genus *Textor*, those of *T. spekei* are aberrant in being retort-shaped like those of the forest weavers, but in contrast to these they have a double ceiling, and the entrance tube is short. In all morphological characters, however, *T. spekei* is so similar to *Textor cucullatus*, especially to the yellow-crowned subspecies, that it certainly cannot be considered as forming a distinct subgenus.

Subgenus *Eremiplectes* Roberts, 1947,

Ostrich, 18. p. 74; type, by original designation, *Ploceus trothae* Reichenow.

Species: *Textor rubiginosus* (Rüppell, 1840) (incl. subsp. *trothae*).

Apparently very closely allied to *Textor* s.str. and perhaps not even separable from that subgenus, to which it is very similar structurally, but differs by the complete absence of yellow in the plumage of both males and females, the male in breeding plumage being black and chestnut, with all black head, but without the black markings on the back found in all forms of *Textor*. The nest is said to be similar to that of *T. spekei*, and possibly *T. rubiginosus* is closest to that species, in spite of the big morphological differences; if this could be proven, a subgenus *Eremiplectes* could no longer be upheld.

Subgenus *Dendrhyphantes* Subg. nov.

Species: *Textor weynsi* (Dubois, 1900), *T. golandi* (Clarke, 1913).

Diagnosis: Medium-sized weavers with much black in the plumage of the male, which has not only a black head and foreneck, but also a black or blackish back, whereas the lower underparts are yellow. Thus differs from all other subgenera of *Textor*, but moreover has a

much slenderer bill, similar to that of *Hyphanturgus nigricollis*. The female shows some resemblance to that of the following subgenus, and it is for that reason that the new subgenus here is placed near that group. When we shall know more about the habits of these little-known birds, it may become necessary to place them in another genus. Type, here designated, *Melanopteryx weynsi* Dubois, 1900, Ornithologische Monatsberichte, 8, p. 69.

Subgenus *Melanopteryx* Reichenow, 1886,

Zool. Jahrb., 1, p. 125; type, by monotypy, *Ploceus nigerrimus* Vieillot, 1819.

Species: *Textor nigerrimus* (Vieillot, 1819) (incl. susbp. *castaneofuscus*) ?*T. albinucha* (Bocage, 1876) (including subspp. *maxwelli*, *holomelas*).

Perhaps this subgenus should contain *Textor nigerrimus* only, which is characterized by its rather heavy bill, similar to that of *Textor* s.str., black-and-chestnut or wholly chestnut coloration of the male (which does not have a seasonal change of dress) and dusky olivaceous and olivaceous yellow colours of the female's plumage. It nests in large colonies on the forest fringes, in forest clearings and in villages, the nests being similar to those of *Textor cucullatus*, with which this weaver occasionally hybridizes. *T. albinucha*, on the other hand, is rather different; its bill is more slender, its feet are weaker, the females are black like the males, and the outermost primary is shorter in this species. Several authors, among whom is Moreau (1960), therefore have taken it away from the neighbourhood of *T. nigerrimus* and preferred to place it near *Phormoplectes* (*Melanoploceus*) *fuscocastaneus*. While this may perhaps be the right place for *albinucha*, I prefer, for the time being, to follow Chapin (1954) and to retain this weaver in the genus *Textor* near *T. nigerrimus*, especially, since its nests are said to be like those of *T. nigerrimus* and *T. cucullatus* and like these it forms large breeding colonies.

SUMMARY

The author proposes a revised generic classification of the Ploceine weaver-birds of the *Ploceus-Malimbus* group (Group A *apud* Moreau, 1960), which he distributes among 16 genera with 20 subgenera. The inter-relationships of the various species and genera are discussed.

REFERENCES

- v. **Boetticher**, H. (1941): Bemerkungen zur Gattungssystematik der Weber (Fam. Passeridae; subfam. Ploceinae). — Anz. Orn. Ges. Bayern 3: 126–130.
- Chapin**, J.P. (1954): The Birds of the Belgian Congo. Vol. 4. — Bull. Amer. Mus. Nat. Hist. 75 B.
- Collias**, N.E. and E.C. (1964): Evolution of nest-building in the weaverbirds (Ploceidae). — Univ. California Publ. in Zoölogy, vol. 73.
- Crook**, J.H. (1960): Nest form and construction in certain West African weaver birds. — Ibis, 102: 1–25.
- (1963): A comparative analysis of nest structure in the weaver birds (Ploceinae). — Ibis 103: 238–262.
- (1964): The evolution of social organisation and visual communication in the weaver birds (Ploceinae). — Behaviour, Suppl. X.
- Henning**, W. (1950): Grundzüge einer Theorie der phylogenetischen Systematik. Berlin.
- (1957): Systematik und Phylogenese. — Ber. Hundertjahrfeier Dtsch. Ent. Ges.: 55–70.
- Immelmann**, K., J. Steinbacher and H.E. Wolters (1965): Prachtfinken. vol. 1. Aachen.
- Mackworth-Praed**, C.W., and C.H.B. Grant (1946): On the generic classification of the weaver-birds of Eastern Africa. — Ibis, 88: 225–228.
- Moreau**, R.E. (1960): Conspectus and classification of the Ploceine weaver-birds. — Ibis, 102: 298–321, 443–471.
- Roberts**, A. (1922): Review of the nomenclature of South African birds. — Ann. Transvaal Mus., 8: 187–272.
- (1947): Reviews and criticism of nomenclatural changes. — Ostrich 18: 59–85.
- Wolters**, H.E. (1954): Über die Gattungen der Ploceinae. — Ann. Mus. Congo Belge, N.S., Zool., 1: 107–113.
- (1957): Die Klassifikation der Webefinken (Estrildidae). — Bonner zool. Beitr., 8: 90–129.

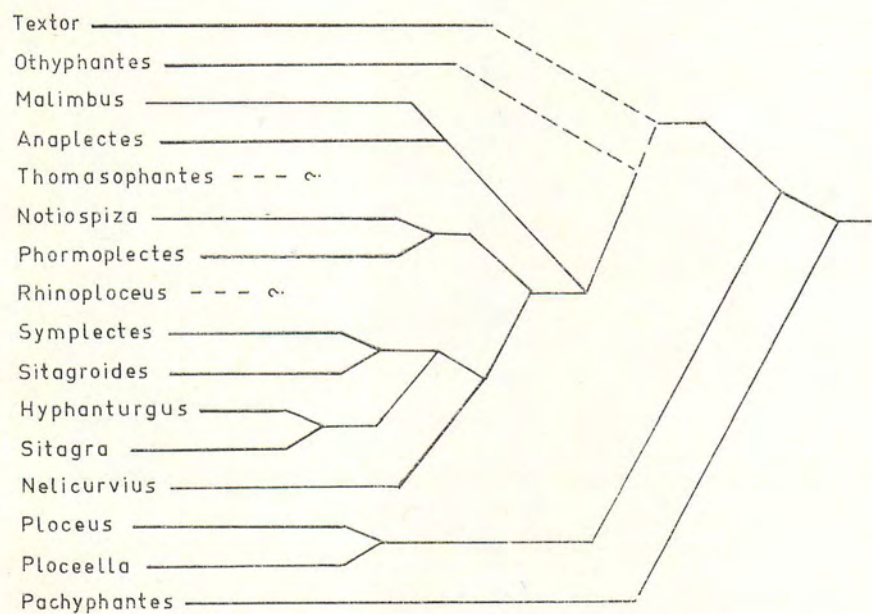


Fig. 1 Diagram showing the probable inter-relationships of the genera of the *Ploceus-Malimbus* group of Ploceinae.

